

FIGURE 1A

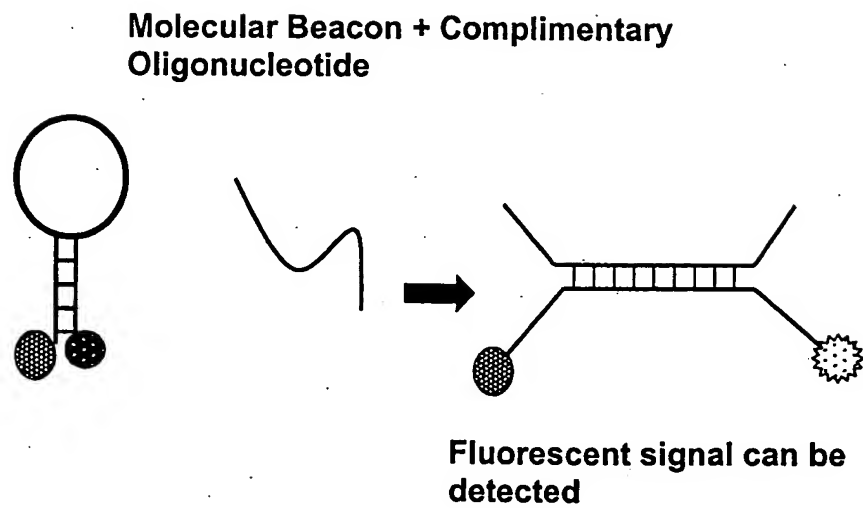


FIGURE 1B

Molecular Beacon on Spectrally Encoded Microspheres + Target Oligonucleotide

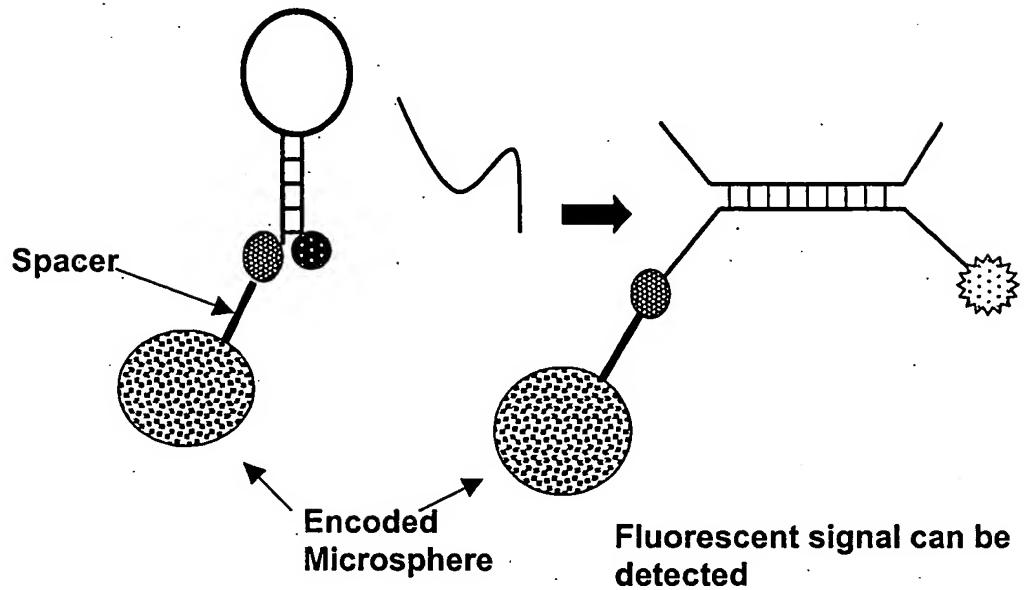


FIGURE 2

Molecular beacons on Qbead microspheres + target oligonucleotide

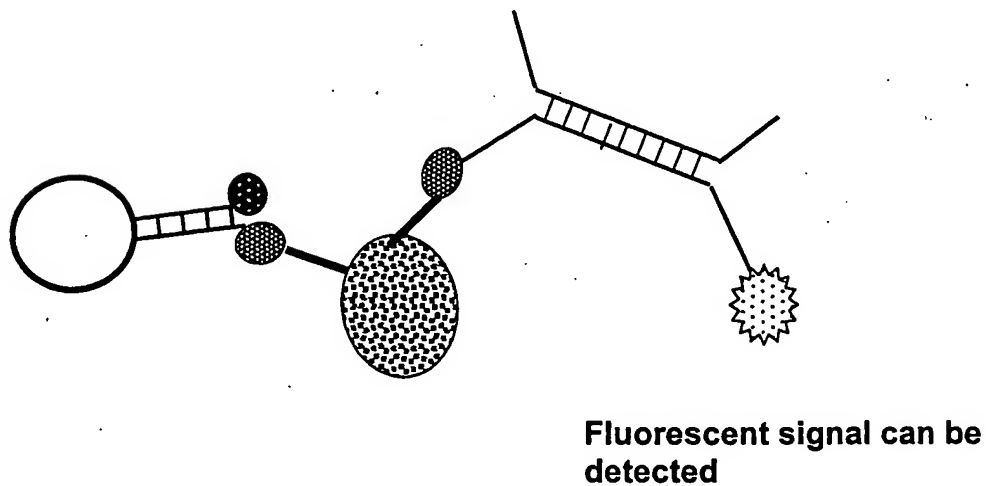


FIGURE 3

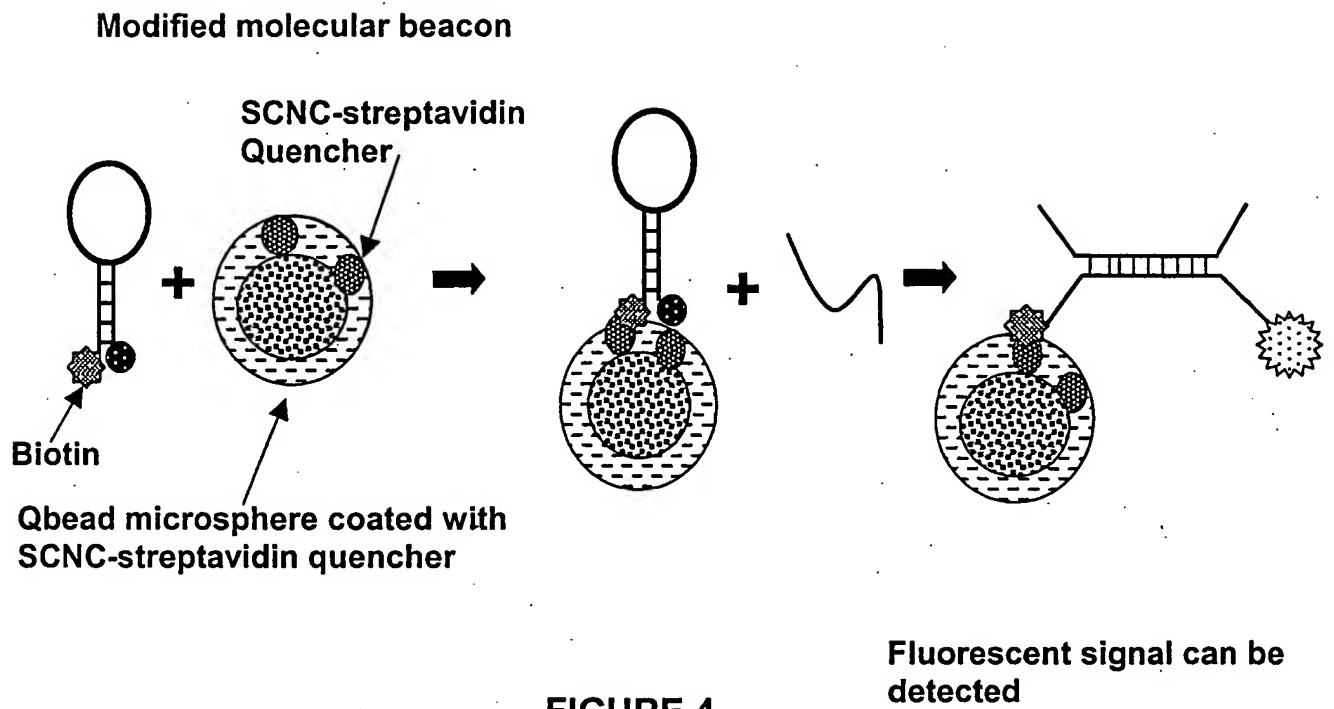


FIGURE 4

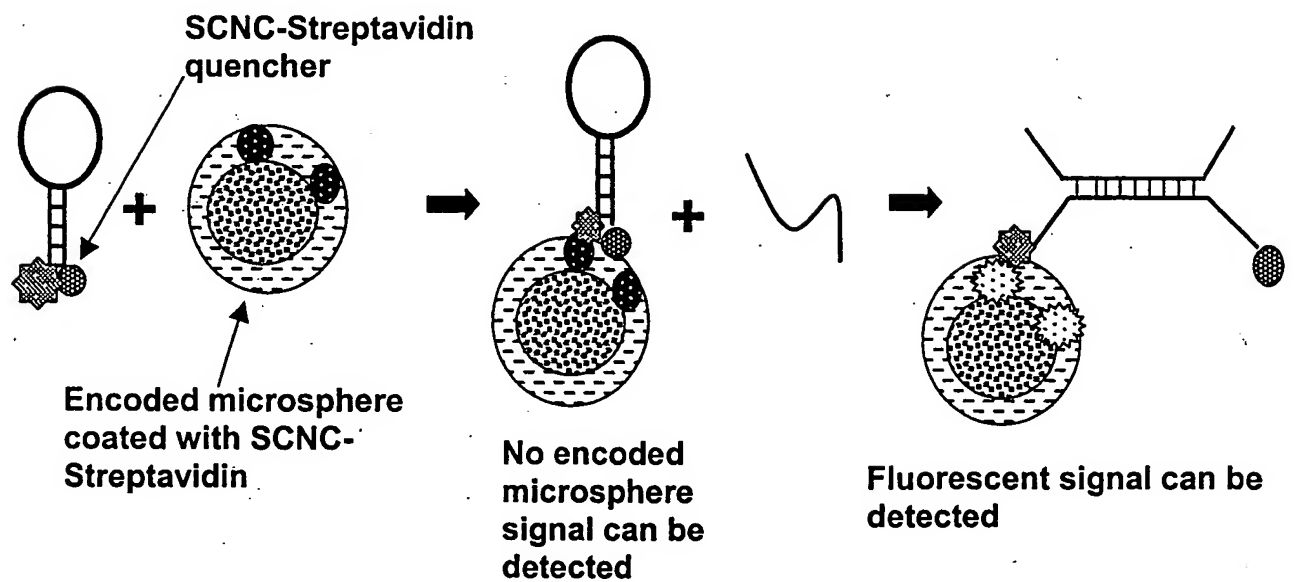


FIGURE 5

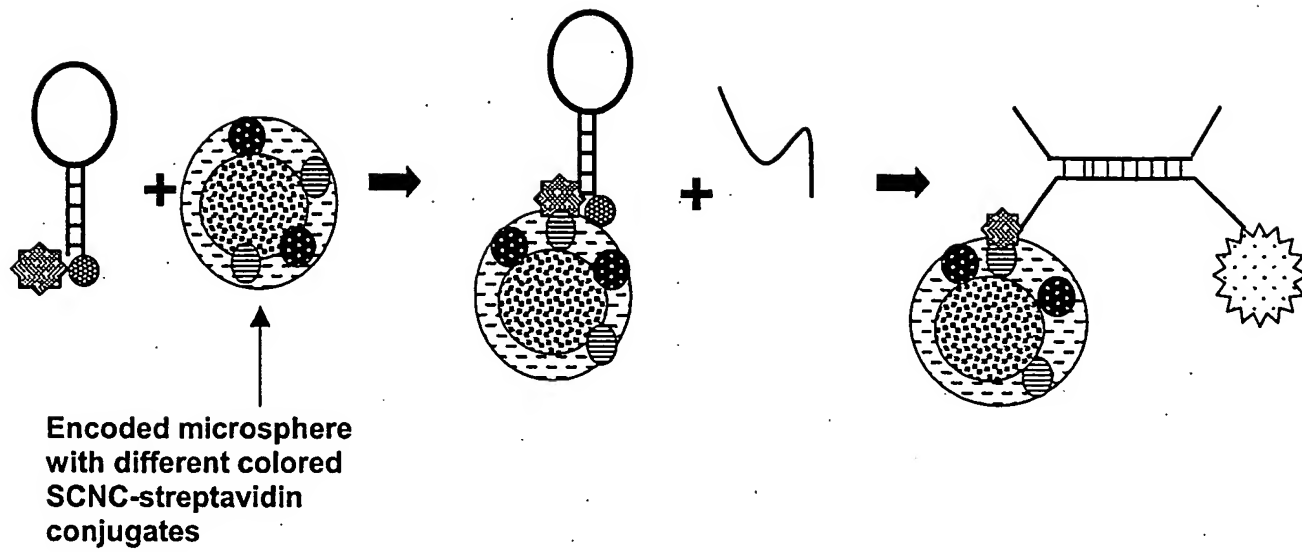


FIGURE 6

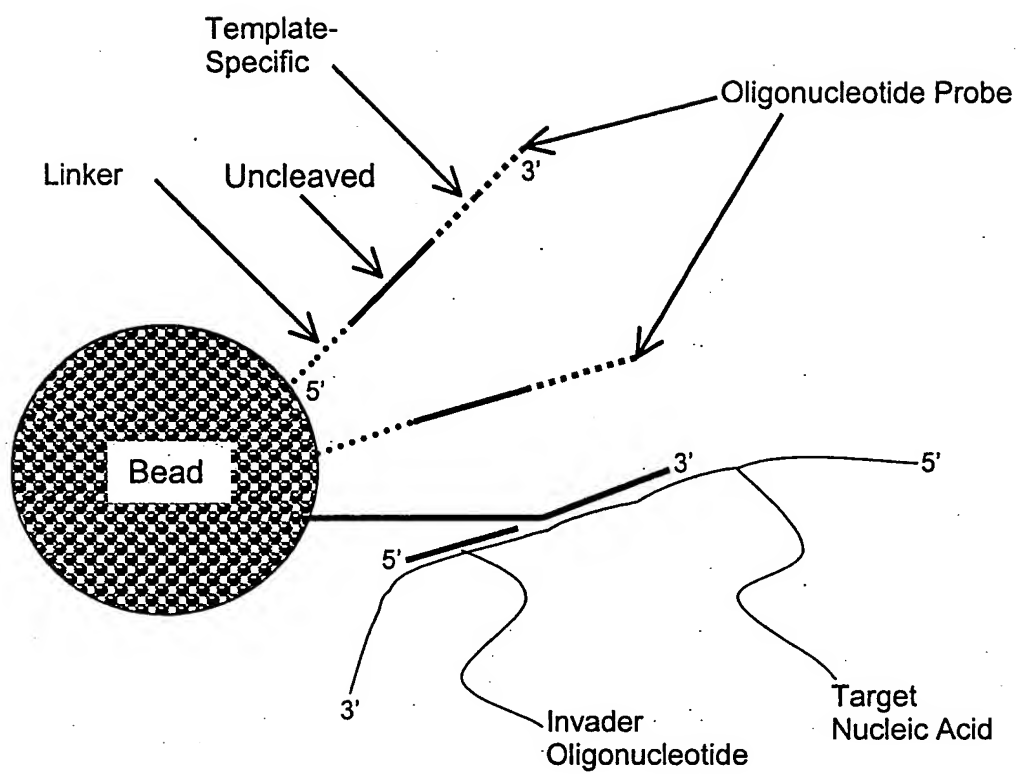


Figure 7A

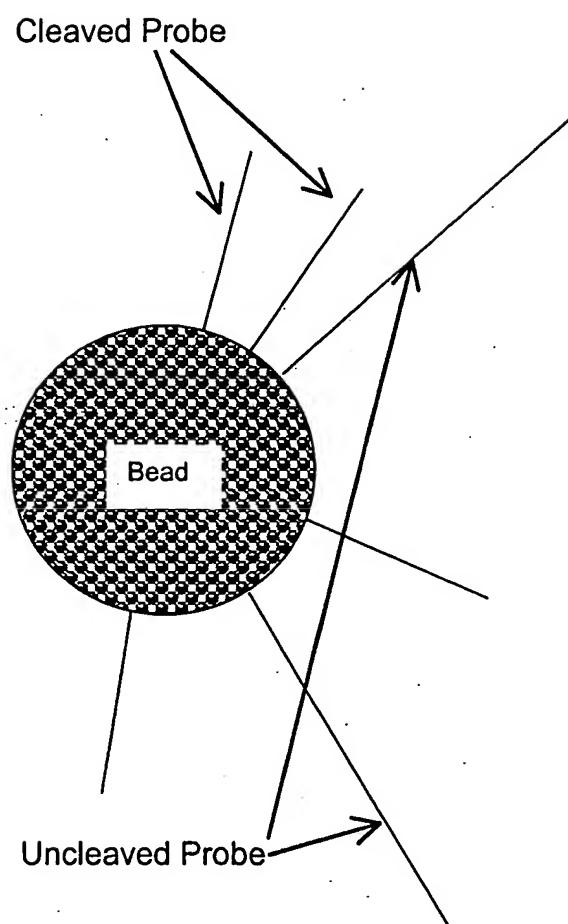


Figure 7B

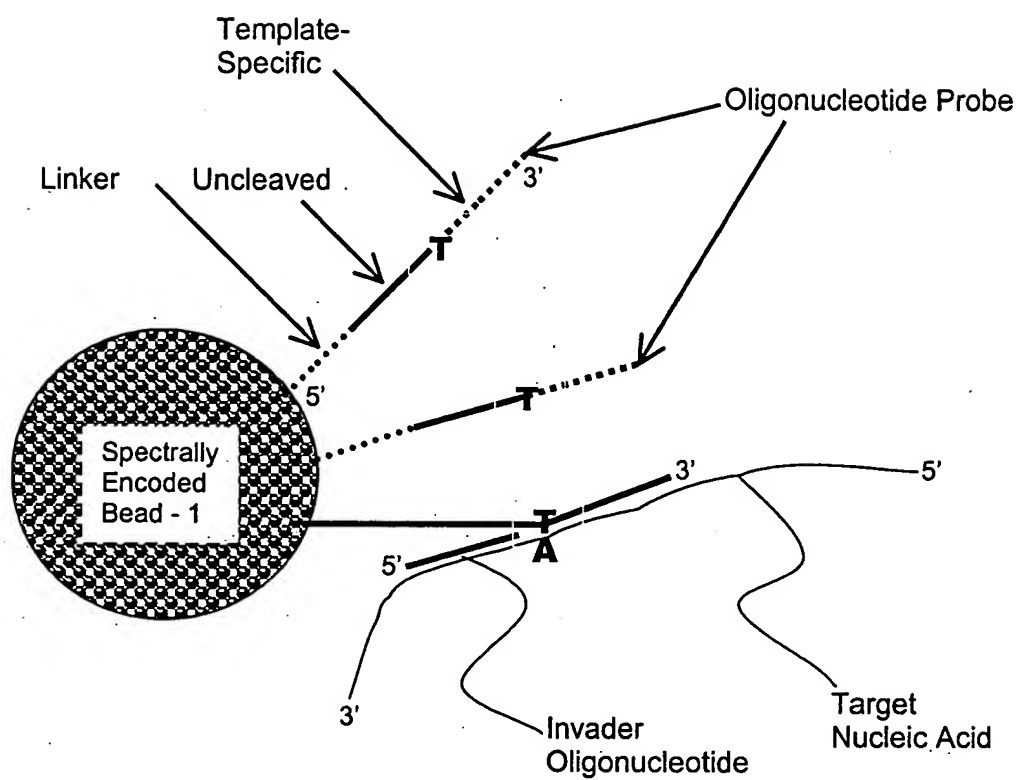


Figure 8A

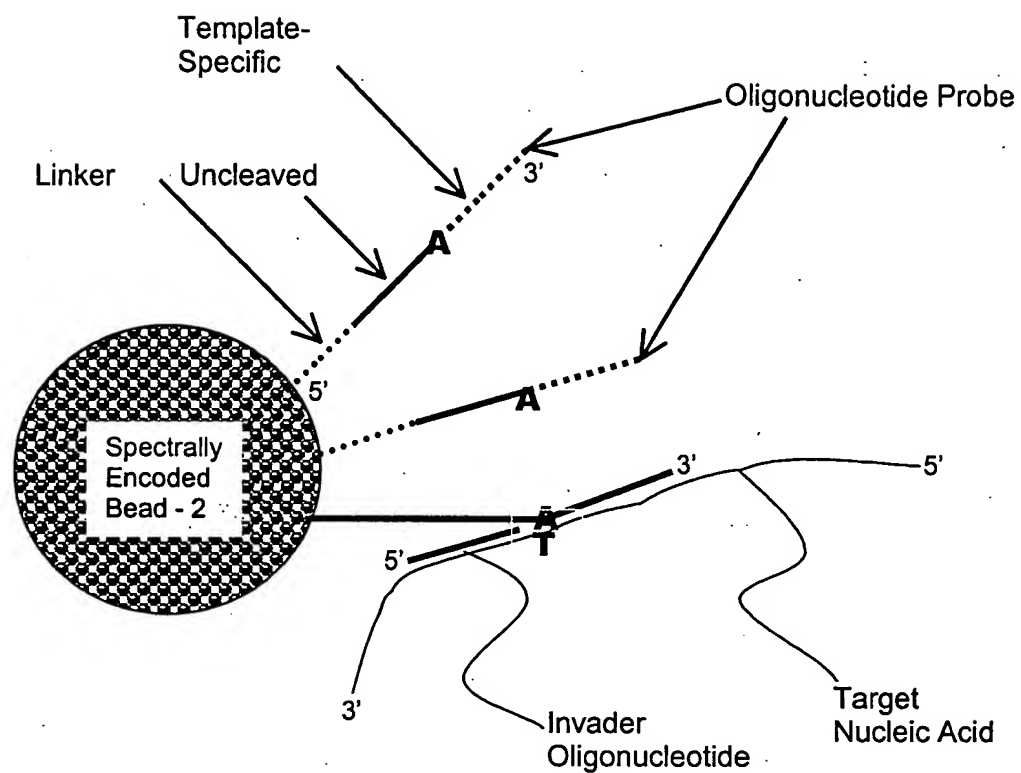


Figure 8B

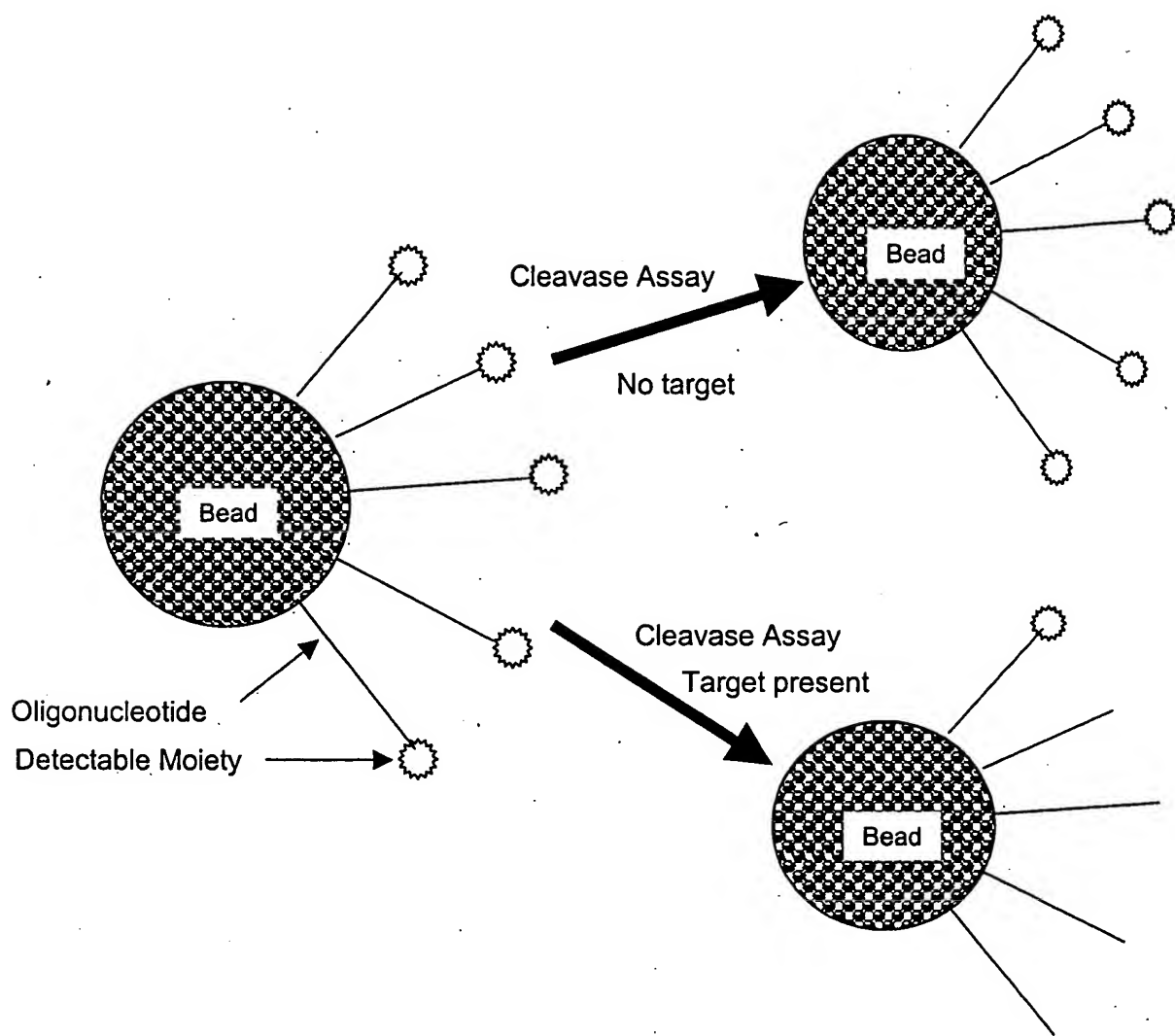


Figure 9

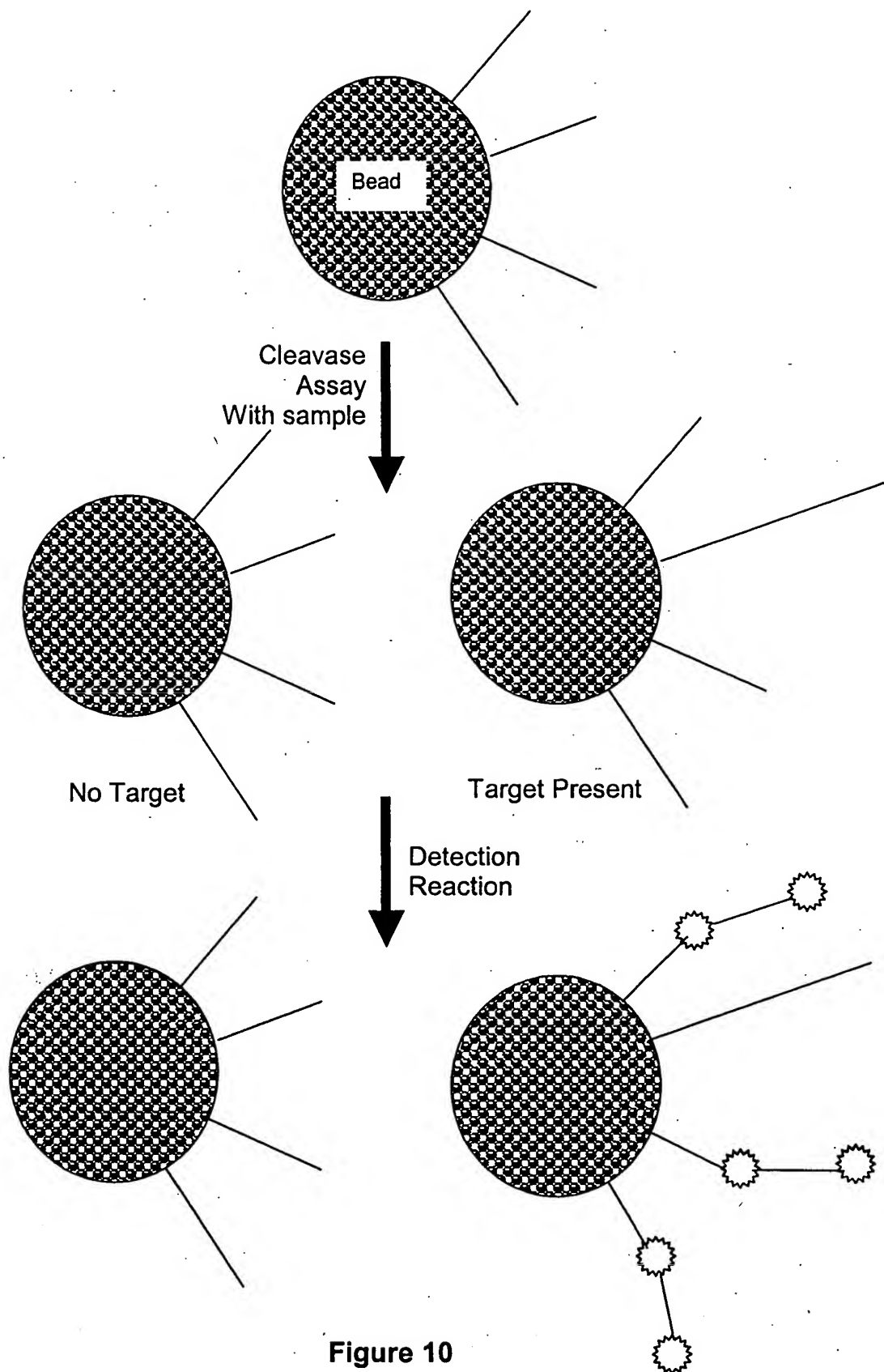


Figure 10

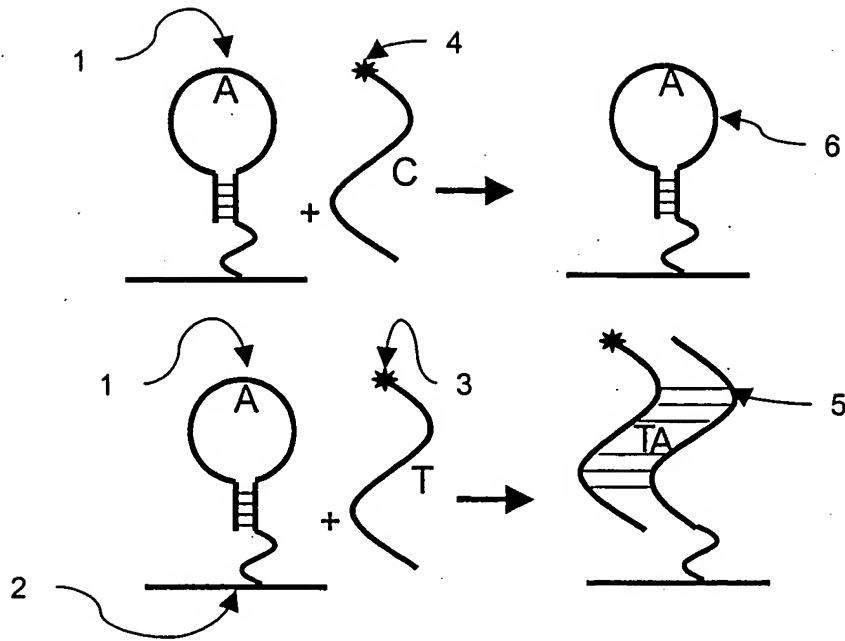
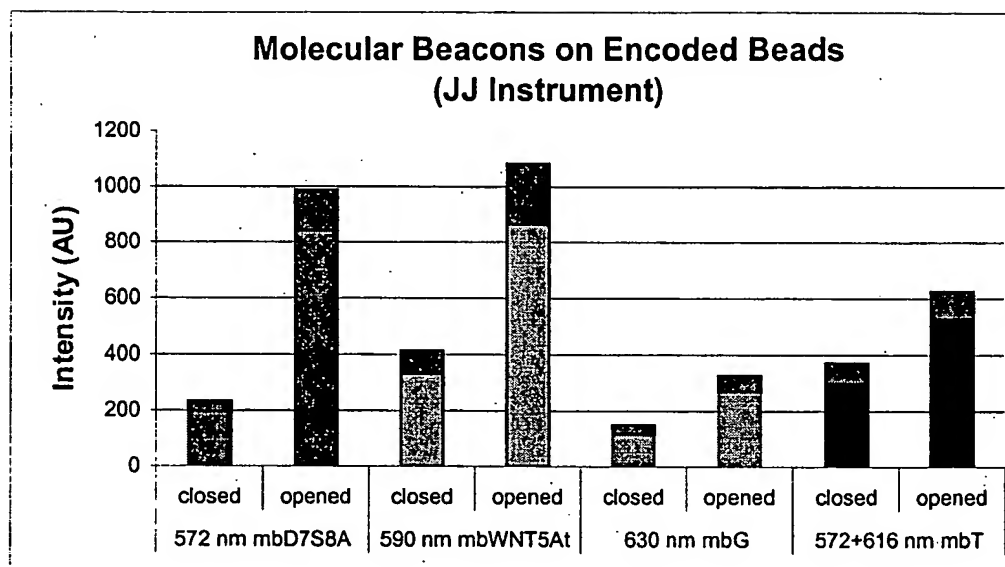
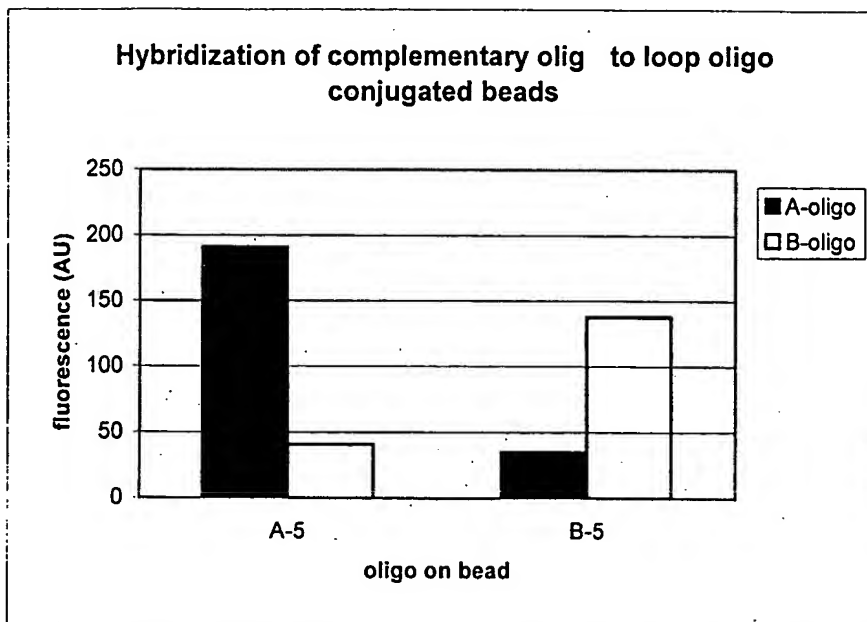


Figure 11 illustrates a SNP discrimination using the loop probe strategy. The unlabeled loop(11) attached to the substrate(21) will hybridize specifically to the perfectly complementary strand(31) in the sample. Fluorescence can be detected based on hybridization of the labeled complementary strand(51), and will not be detected with the mismatched sample(61).

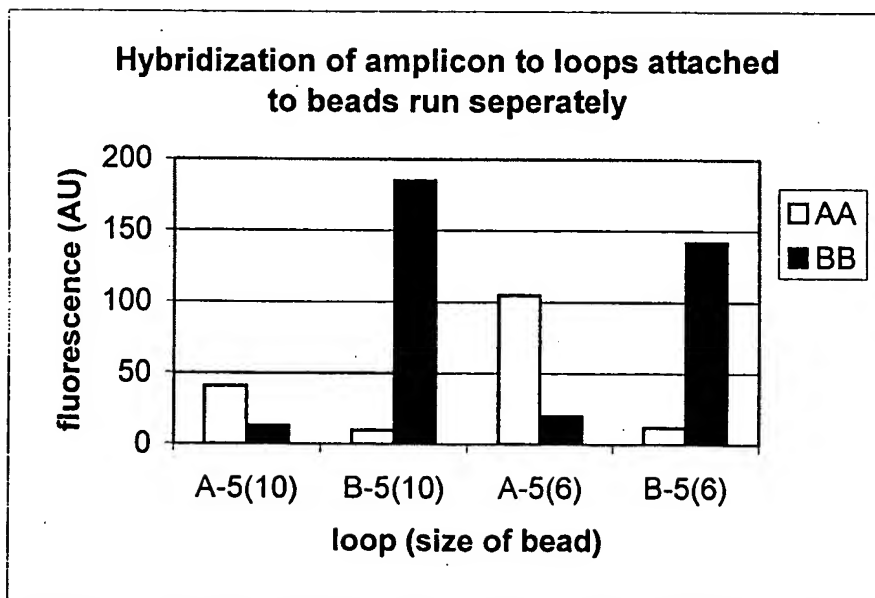
Fig. 12





bead	complementary oligo	
	A-oligo	B-oligo
A-5	191	41
B-5	35	138

Figure 13+A46: Hybridization of complementary oligo to allele specific oligos on 10μ beads.



bead	amplicon	
	AA	BB
A-5(10)	41	13
B-5(10)	10	185
A-5(6)	105	20
B-5(6)	12	142

Figure 14: The graph show the result of hybridization of amplicon to allele specific loop oligo conjugated beads using either 10μ or 6μ beads. The results show allele specificity on the bead for the AA genotype and the BB genotype.

Allelic Discrimination of Three Genomic DNAs at D7S8 Locus with Molecular Beacon Beacon Assay on different colors Qbeads

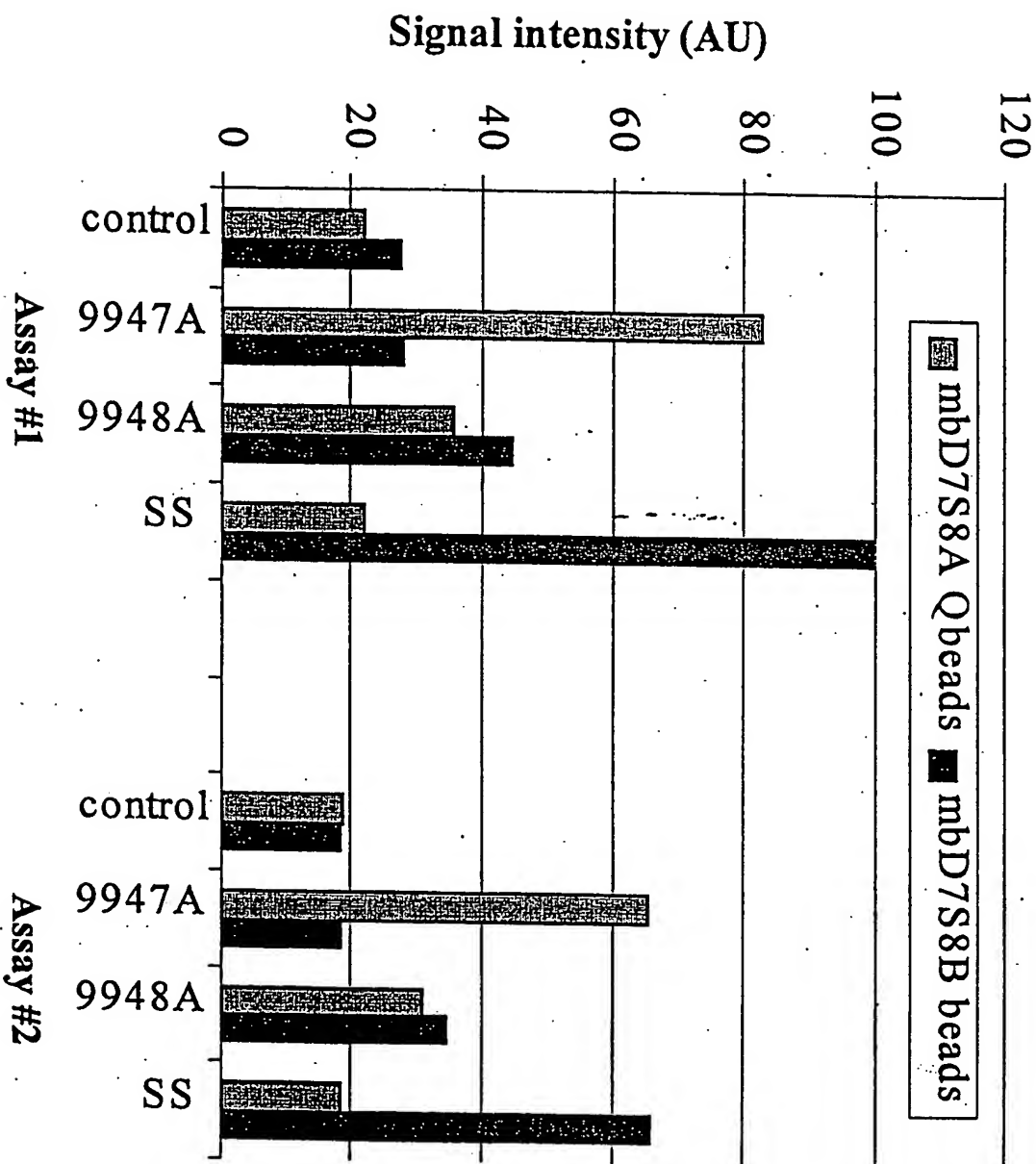


FIGURE 15